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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,548	07/25/2003	Yasuhiko Aoki	064731.0339	3535
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EXAMINER

JEAN BART, RALPH

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,548

Applicant(s)

AOKI ET AL.

Examiner

Ralph Jean-Bart

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/05/2006</u> , <i>etc.</i> | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,11 are rejected under 35 U.S.C. 102(b) as being anticipated by de Boer et al (U.S 6,400,859).

With respect to claim 1 and 11, de Boer teaches a system and a method for communicating optical traffic between ring networks (see abstract), a first optical ring network (see figure 4 first optical ring 50/OC192 BLSR) and a second optical ring network (see figure 4 second optical ring 52/OC48 BLSR), each optical ring network operable to communicate optical traffic comprising a plurality of wavelengths (it is inherent that an optical ring network is capable to communicate optical traffic with a plurality of wavelength see figure 4), a first ring interconnect (RIC) node (see figure 4 primary path 54) and a second RIC node (see figure 4 secondary path 56) , each RIC node coupled to the first and second optical ring networks (see figure 4 optical ring NE6 coupled to optical ring NE8 and vice versa); the first RIC node operable to communicate optical traffic between the first and second optical ring networks (see figure 4 primary node NE6 and NE8; column 2 lines 58-65); and the second RIC node operable to

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communicate optical traffic between the first and second optical ring networks when the first RIC node is unable to communicate optical traffic between the first and second optical ring networks (see figure 4 secondary node NE3 and NE10).

Claims 1-5, 7-15, 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Arecco et al (U.S 7,072,580).

With respect to claim 1 and 11, Arecco teaches a system and a method for communicating optical traffic between ring networks (see abstract), a first optical ring network (see figure 22 Network 1) and a second optical ring network (see figure 22 network 2), each optical ring network operable to communicate optical traffic comprising a plurality of wavelengths (see abstract, figure 3 wavelength λ_{yp} - λ_{xp}), a first ring interconnect (RIC) node (see figure 22 node D) and a second RIC node (see figure 22 Node E) , each RIC node coupled to the first and second optical ring networks (see figure 22 ring interconnect node D, D' and E, E'); the first RIC node operable to communicate optical traffic between the first and second optical ring networks (see figure 21; column 26 lines 37-55); and the second RIC node operable to communicate optical traffic between the first and second optical ring networks when the first RIC node is unable to communicate optical traffic between the first and second optical ring networks (see column 27 lines 19-29).

With respect to claim 2 and 12, Arecco teaches the second RIC node is operable to determine when the first RIC node is unable to communicate optical traffic between

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the first and second optical ring networks (see figure 23 node D and D'; column 27 lines 37-43).

With respect to claims 3 and 13 Arecco teaches receiving optical traffic from the first optical ring network at the first RIC node (see column 26 line 59- column 27 line 3); passively passing through a first copy of the optical traffic at the first RIC node along the first optical ring (see figure 22; column 26 lines 59-66), dropping a second copy of the optical traffic at the first RIC node (column 26 lines 59-66); selecting one or more wavelengths of the dropped optical traffic at the first RIC node (column 26 line 66- column 27 line 3); and communicating the one or more wavelengths to the second optical ring network at the first RIC node (see column 27 line 58- column 28 line 13).

With respect to claim 4 and 14, Arecco teaches all the limitations of claims 3 and 13. In addition, Arecco teaches passively passing through a third copy of the optical traffic at the second RIC node along the first optical ring (see figure 16 first optical splitter 221 and switch 2312); dropping a fourth copy of the optical traffic at the second RIC node (see figure 16 switch 234; column 24 lines 49-53); selecting one or more wavelengths of the dropped optical traffic at the second RIC node (see figure 16 second OADM 5, optical ring 3; column 14 lines 28-35), and communicating the one or more wavelengths to the second optical ring network at the second RIC node when the first RIC node is unable to communicate optical traffic between the first and second optical ring networks (see figures 22, 23, 24; column 27 lines 58-65).

With respect to claim 5 and 15, Arecco teaches the first and second RIC nodes each comprise a wavelength select unit operable to select one or more wavelengths of

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optical traffic for communication between the first and second optical ring networks (see figure 16 splitter 221 is selectively selected wavelength from node D to D').

With respect to claim 7 and 17, Arecco teaches wherein at least one wavelength select unit comprises a second number of switches for selectively forwarding a second number wavelengths of optical traffic for communication between the first and second optical ring networks (see figure 16 second switch 232, transmitter λ_x coupler to receiver Rx₂).

With respect to claim 8 and 18, Arecco teaches the second RIC node is operable to communicate optical traffic between the first and second optical ring networks at a second RIC when the first RIC node is unable to perform such communication due to a failure of the first RIC node (see figure 23 node failure on the D-D'; column 29 lines 48-59).

With respect to claim 9 and 19, Arecco teaches communicating optical traffic between the first and second optical ring networks at a second RIC node when the first RIC node is unable to perform such communication due to a fiber cut to the first optical ring network (see column 21 lines 36-48).

With respect to claims 10 and 20, Arecco teaches detecting traffic of one or more wavelengths at a rejection block to determine when the first RIC node is unable to communicate optical traffic between the first and second optical ring networks (see figure 16 splitter elements 232, 231; column 26 lines 59-66).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arecco et al (U.S. 7,072,580) in view of Fevrier et al (U.S. 5,612,805).

With respect to claim 6 and 16, all the limitations of these claims have been taught in claims 5 and 15 above. Arecco fails to teach filtering a first number of wavelengths of optical traffic for communication between the first and second optical ring networks at a tunable filter array of the wavelength select unit.

However, Fevrier teaches filtering a first number of wavelengths of optical traffic for communication between the first and second optical ring networks at a tunable filter array of the wavelength select unit (see figure 5 tunable filter $T_{F1} - T_{FN}$; column 5 lines 50-61).

Therefore it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have modified the Auto protected Optical Communication Ring Network of Arecco by incorporating a first number of wavelengths of optical traffic for communication between the first and second optical ring networks at a tunable filter array of the wavelength select unit in order to provide an add drop multiplexer that does not suffer from the

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drawbacks of that known multiplexer as taught by Fevrier (see Fevrier column 2 lines 15-17).

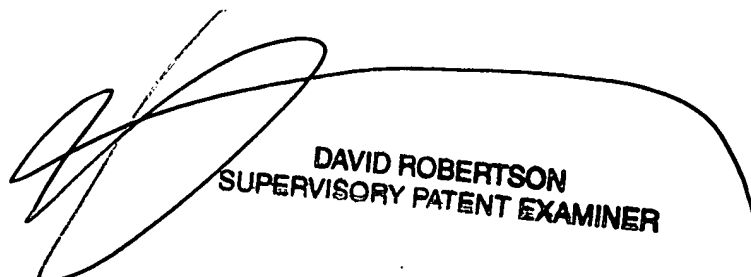
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ralph Jean-Bart whose telephone number is (571)270-1017. The examiner can normally be reached on Mon-Thurs 7:30-5:00PM; Fri 7:30-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Robertson can be reached on (571)272-4186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RJB
Ralph Jean-Bart

09/13/2006


DAVID ROBERTSON
SUPERVISORY PATENT EXAMINER